

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-25 (Canceled).

26. (Currently amended) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; a first insulating layer, wherein a portion of said insulating layer is formed on said gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including impurities of a first conductivity type, formed over the semiconductor layer having the amorphous structure;

a second insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the impurities of a first conductivity type so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the first insulating layer;

a wiring formed on the source and drain regions and a portion of the pixel electrode;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, a portion of the first insulating layer on the storage capacitor wiring and a portion of the pixel electrode on the first insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to the wiring;

~~wherein the input terminal portion includes a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel electrode, and~~

wherein the input terminal portion comprises a first layer comprising a same material as the gate electrode, a second layer comprising a same material as the pixel electrode, and

wherein the wiring is formed on the second layer comprising the same material as the pixel electrode,

wherein the storage capacitor wiring is completely covered by the pixel electrode.

27. (Currently amended) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; a first insulating layer, wherein a portion of said first insulating layer is formed on said gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including impurities of first conductivity type, formed over the semiconductor layer having the amorphous structure;

a second insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the impurities of first conductivity type so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the first insulating layer;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, a portion of the first insulating layer on the storage capacitor wiring and a

portion of the pixel electrode on the first insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion comprises a first layer comprising ~~the~~ a same material as ~~that of the gate electrode~~ and a second layer comprising ~~the~~ a same material as ~~that of the pixel electrode~~ in contact with the first layer through a ~~single~~-contact hole formed only in the first insulating layer, and

wherein the wiring is formed on the second layer comprising the same material as the pixel electrode,

wherein the storage capacitor wiring is completely covered by the pixel electrode.

28. (Currently amended) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; a first insulating layer, wherein a portion of said first insulating layer is formed on said gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including impurities of first conductivity type, formed over the semiconductor layer having the amorphous structure;

a pixel electrode formed in contact with the first insulating layer;

a second insulating layer comprising an inorganic material and formed on the pixel electrode and the semiconductor layer having the amorphous structure and the semiconductor layer containing the impurities of first conductivity type so as to be in contact with at least a part of the channel

formation region;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, a portion of the first insulating layer on the storage capacitor wiring and a portion of the pixel electrode on the first insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

~~wherein the input terminal portion includes a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel electrode, and~~

wherein the input terminal portion comprises a first layer comprising a same material as the gate electrode, a second layer comprising a same material as the pixel electrode, and

wherein the wiring is formed on the second layer comprising the same material as the pixel electrode,

wherein each of the gate electrode, the storage capacitor wiring and the first layer has a tapered portion formed on at least an end portion thereof, and

wherein the storage capacitor wiring is completely covered by the pixel electrode.

29. (Canceled)

30. (Currently amended) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; a first insulating layer, wherein a portion of said first insulating

layer is formed on said gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including impurities of first conductivity type, formed over the semiconductor layer having the amorphous structure;

a second insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the impurities of first conductivity type so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the first insulating layer;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, a portion of the first insulating layer on the storage capacitor wiring and the pixel electrode on the first insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion comprises a first layer comprising ~~[[the]]~~ a same material as ~~that of the~~ gate electrode and a second layer comprising ~~[[the]]~~ a same material as ~~that of the~~ pixel electrode in contact with the first layer through a ~~single~~-contact hole formed only in the first insulating layer, and

wherein the wiring is formed on the second layer comprising the same material as the pixel electrode.

wherein each of the gate electrode, the storage capacitor wiring and the first layer has a tapered portion formed on at least an end portion thereof, and

wherein the storage capacitor wiring is completely covered by the pixel electrode. --

31. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; a first insulating layer, wherein a portion of said insulating layer is formed on said gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including impurities of a first conductivity type, formed over the semiconductor layer having the amorphous structure;

a second insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the impurities of a first conductivity type so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the first insulating layer;

a wiring formed on the source and drain regions and a portion of the pixel electrode;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, a portion of the first insulating layer on the storage capacitor wiring and a portion of the pixel electrode on the first insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to the wiring;

wherein the input terminal portion comprises a first layer comprising a same material as the gate electrode, a second layer comprising a same material as the pixel electrode, and

wherein the wiring is formed on the second layer comprising the same material as the pixel electrode.

32. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; a first insulating layer, wherein a portion of said first insulating layer is formed on said gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including impurities of first conductivity type, formed over the semiconductor layer having the amorphous structure;

a second insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the impurities of first conductivity type so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the first insulating layer;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, a portion of the first insulating layer on the storage capacitor wiring and a portion of the pixel electrode on the first insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion comprises a first layer comprising a same material as the gate electrode and a second layer comprising a same material as the pixel electrode in contact with the first layer through a contact hole formed only in the first insulating layer, and

wherein the wiring is formed on the second layer comprising the same material as the pixel electrode.

33. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; a first insulating layer, wherein a portion of said first insulating layer is formed on said gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including impurities of first conductivity type, formed over the semiconductor layer having the amorphous structure;

a pixel electrode formed in contact with the first insulating layer;

a second insulating layer comprising an inorganic material and formed on the pixel electrode and the semiconductor layer having the amorphous structure and the semiconductor layer containing the impurities of first conductivity type so as to be in contact with at least a part of the channel formation region;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, a portion of the first insulating layer on the storage capacitor wiring and a portion of the pixel electrode on the first insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion comprises a first layer comprising a same material as the gate electrode, a second layer comprising a same material as the pixel electrode, and

wherein the wiring is formed on the second layer comprising the same material as the pixel electrode,

wherein each of the gate electrode, the storage capacitor wiring and the first layer has a

tapered portion formed on at least an end portion thereof.

34. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; a first insulating layer, wherein a portion of said first insulating layer is formed on said gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including impurities of first conductivity type, formed over the semiconductor layer having the amorphous structure;

a second insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the impurities of first conductivity type so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the first insulating layer;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, a portion of the first insulating layer on the storage capacitor wiring and the pixel electrode on the first insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion comprises a first layer comprising a same material as the gate electrode and a second layer comprising a same material as the pixel electrode in contact with the first layer through a contact hole formed only in the first insulating layer, and

wherein the wiring is formed on the second layer comprising the same material as the pixel

electrode,

wherein each of the gate electrode, the storage capacitor wiring and the first layer has a tapered portion formed on at least an end portion thereof.

35. (New) A semiconductor device according to claim 26, wherein the semiconductor device selected from a group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

36. (New) A semiconductor device according to claim 27, wherein the semiconductor device selected from a group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

37. (New) A semiconductor device according to claim 28, wherein the semiconductor device selected from a group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

38. (New) A semiconductor device according to claim 30, wherein the semiconductor device selected from a group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

39. (New) A semiconductor device according to claim 31, wherein the semiconductor device selected from a group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

40. (New) A semiconductor device according to claim 32, wherein the semiconductor device selected from a group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

41. (New) A semiconductor device according to claim 33, wherein the semiconductor device selected from a group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

42. (New) A semiconductor device according to claim 34, wherein the semiconductor device selected from a group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.